

IMPROVING PRODUCT QUALITY AND SAFETY

改善產品質素及安全

Product quality and safety are of paramount importance to consumers, especially in the current circumstances when the pandemic has shifted consumption priorities and reshaped consumer behaviour. The pandemic-induced global inflation has driven consumers to search for more value-for-money products, while heightened health awareness and more time spent at home are also key factors for this sea change in consumer demand.

As part of its ongoing research and testing programme, the Council monitors more than 1,000 products a year, evaluating their essential product features including safety, performance, ease of use, durability and environmental sustainability, serving as reliable reference for consumers.

疫情改變了消費重點並重塑了消費模式，產品質素及安全對消費者顯得更為重要。除了因疫情引發的全球通脹，促使消費者尋找更價廉物美的產品之外，健康意識的提高及長時間居家抗疫，亦是導致消費者需求出現巨變的關鍵因素。

本會在持續進行的研究及測試計劃中，每年監測超過 1,000 件產品，評估它們的產品特性，包括安全、效能、使用方便程度、耐用程度及環境可持續性，為消費者提供可靠的參考。

Research and Test Reports

A total of 53 testing, survey and research reports were published in the Council's monthly CHOICE Magazine during the year⁸. The products surveyed ranged from popular foodstuffs and household goods to cosmetic and personal care products, clothing and apparel, children's products, pet products, electrical appliances and consumer electronics. The findings alerted consumers to immediate or potential product hazards and offered objective guidance to making informed choices.

Products found to be non-compliant with Hong Kong regulations or international standards were referred to the relevant regulatory authorities by the Council for immediate follow-up, while the concerned manufacturers, agents and service providers were called on to rectify the faults and improve the quality and standards of their offerings. Over the years, such market monitoring mechanisms have proven to be effective in facilitating law enforcement and driving different businesses to ensure value creation in their offerings.

研究及測試報告

年內，本會在《選擇》月刊上發表的產品測試、調查和研究報告共有 53 份⁸，涵蓋的產品範圍從常見的食品和家居用品，到化妝品和個人護理產品、服裝、兒童產品、寵物產品、電器和電子產品。有關結果能提醒消費者注意產品的即時或潛在風險，成為客觀的消費指南。

每當發現產品未能符合香港法規或適用的國際標準時，本會均會通知相關監管機構立即跟進，並呼籲製造商、代理商及服務供應商糾正錯誤，改善產品質素和提升產品水準。多年來，這種市場監察機制均能有效協助執法和推動業界為產品創優增值。

⁸ See Appendix 6 for the lists of testing reports, market survey and in-depth study reports published during 2021-22. 於2021-22年度公布的產品測試、市場調查及研究報告一覽表見附錄六。

Types of Product Tests

The Council conducts tests on more than a thousand products during the year by engaging universities or internationally recognised laboratories and through collaboration with Government departments. As an active member of the International Consumer Research & Testing (ICRT), which is an international consortium of more than 30 consumer organisations, the Council benefits from the experience of the other markets by accessing ICRT's product tests and valuable resources.

Food

As consumers have become increasingly health-conscious, the Council has stepped up resources in testing popular food products and advised consumers on their safety and nutrition levels, with 13 test reports published during the year compared to 10 test reports in the previous reporting year.

Meatballs

As meatballs are a popular ingredient in Hong Kong-style dishes such as soup noodles, hot pot and barbecue, their nutritional value and safety are a topic of public interest. The Council tested 60 samples of pre-packaged and non-prepackaged meatballs covering 5 categories, namely beef meatballs (including beef balls and beef tendon balls), gong wan (a type of meatball typically known to contain pork), fish balls, cuttlefish balls and lobster balls.

In this first-ever DNA test on meatballs, all 10 samples of lobster balls were not detected with crustacean DNA, while 12 samples of beef balls or beef tendon balls were found to contain pig DNA. Besides reminding people with religious dietary restrictions to pay heed to the meat ingredients when purchasing meatballs, the Council also urged traders to enhance the transparency of the types of meat used for making meatballs.

75% of the meatballs were found to be "high-sodium" foods (over 600mg sodium content per 100g solid food sample), amongst which the fish ball samples had the highest average sodium content. Gong wan was found to be the category with the highest average total fat content, while that for lobster balls was the lowest. 4 gong wan and 2 beef balls reached "high-fat" levels (over 20g total fat content per 100g sample).

Samples detected with heavy metal contamination were mostly seafood-type meatballs, 50% of which were detected with mercury or methylmercury. The fish ball sample with the highest level of methylmercury was considered not in compliance with the relevant regulations by the Centre for Food Safety (CFS) after investigation. Consumers were advised to consume meatballs in moderation, control the portion to avoid excessive intake of sodium, fat, and consequent health risks.

牛肉丸 蛋白質 16.1克 總脂肪 11.3克 澱粉 23.9克 鈉 715毫克 牛肉丸及牛筋丸 7款: 100%牛羶筋 13款: 含豬肉/成碎基肉	魚蛋 蛋白質 12.3克 總脂肪 2克 澱粉 3.2克 鈉 814毫克 注意: 魚蛋皮含有福壽螺 (其中3款含福壽螺 出19個樣品均以上)	貢丸 蛋白質 14.9克 總脂肪 19.4克 澱粉 1.6克 鈉 568毫克 5款: 100% 雞羶筋 5款: 含豬肉及雞羶筋	牛筋丸 蛋白質 15.8克 總脂肪 11.9克 澱粉 23.9克 鈉 611毫克	墨魚丸 蛋白質 12克 總脂肪 7.2克 澱粉 5.9克 鈉 654毫克 3款: 100% 墨魚羶筋 3款: 100% 鮑魚羶筋	龍蝦丸 蛋白質 5.3克 總脂肪 1.9克 澱粉 5克 鈉 794毫克 全部給予出淨蝦類 動物基肉
--	---	--	---	---	--

產品測試的種類

年內，本會透過委託大學或國際認可的實驗室，或與政府部門協作，測試超過千種產品。國際消費者研究及試驗組織 (ICRT) 由世界各地超過 30 個消費者組織組成，本會作為 ICRT 的活躍成員，亦透過共享 ICRT 的產品測試和其寶貴資源，分享其他市場的經驗。

食品

隨著消費者的健康意識日漸提高，本會投放更多資源，測試廣受歡迎的食品，並提供有關安全和營養水平的建議，年內發布了 13 份測試報告，較去年的 10 份為多。

肉丸

肉丸常見於湯麵、火鍋、燒烤等本地菜式，其營養價值及食物安全備受公眾關注。本會測試市面上 5 類、共 60 款預先包裝及散裝的肉丸樣本，包括牛丸 (分別為牛肉丸及牛筋丸)、貢丸、魚蛋、墨魚丸和龍蝦丸。

本會首次對肉丸進行基因測試，發現全部 10 款龍蝦丸樣本中，均沒有檢出甲殼類動物基因；在 12 款牛肉丸或牛筋丸樣本中，卻檢出豬的基因。本會除了提醒有宗教信仰人士選購肉丸時，宜注意肉丸所含的肉類成分之外，亦敦促商戶增加所使用肉類資料的透明度。

7 成半樣本屬「高鈉」食物 (即每 100 克食物含超過 600 毫克鈉)，當中以魚蛋類樣本檢出的平均鈉含量最高。貢丸樣本檢出的平均脂肪含量最高，龍蝦丸則最低，4 款貢丸和 2 款牛丸達到食安中心指引中的「高脂」食物水平 (即每 100 克食物含超過 20 克總脂肪)。

檢出受重金屬污染的樣本大多屬於海產類肉丸，當中有一半檢出汞或甲基汞。甲基汞含量最高為 1 款魚蛋樣本，食安中心跟進後指此樣本不符合有關法例要求。本會建議消費者進食肉丸要適可而止，以免攝入過多鈉和脂肪，影響健康。



Coffee

Coffee is an energy-booster for many office workers, as well as a pick-me-up for consumers who wish to sneak a break from the daily grind. In the Council's test on 49 coffee products of 4 different categories, the genotoxic carcinogen acrylamide was detected in 47 samples with amounts varying by almost 14 times, of which the instant coffee samples had a higher content. The Council reminded consumers that immature coffee beans contain a large amount of free asparagine which forms acrylamide when roasted at high temperatures.

Test results revealed that the caffeine content among the samples differed considerably. The average caffeine content of instant coffee was higher than coffee beans, coffee capsules and coffee powders, due to its extraction and concentration process. Based on the preparation formula indicated on the samples, the highest caffeine content of 1 cup of coffee could be around 295mg, which means drinking 2 cups would exceed the daily recommended intake limit for adults (400mg). Consumers should note that prolonged caffeine intake will increase their tolerance to caffeine, consequently requiring a higher caffeine level to achieve the same physiological effects. This may also lead to physiological dependence on caffeine, possibly causing withdrawal symptoms such as headaches, irritability and fatigue once consumption stops.

Moreover, pesticides were detected in 46 coffee samples, out of which 45 contained folpet, a pesticide commonly found in fruits and vegetables, which could cause irritation to the eyes and throat. 13 contained 2-phenylphenol, which, despite its acute toxicity not being high, could cause bladder tumours as shown in animal experiments. 3 samples contained pyridaben, a pesticide commonly found in nut plants, and exhibits a mild to moderate acute toxicity. 1 sample contained biphenyl, which may cause kidney poisoning or symptoms of the central nervous system with prolonged intake. The levels of folpet in 38 samples, 2-phenylphenol in 1 sample, and pyridaben in 1 sample exceeded the maximum residue limit set by the European Food Safety Authority (EFSA) (Folpet: 0.10mg/kg, 2-phenylphenol and pyridaben: 0.05mg/kg); the detected amount of folpet in 1 sample even exceeded the upper limit by more than 6 times.

咖啡

不少上班族以咖啡提神，亦是消費者忙裡偷閒時的一種生活品味。本會測試市面上4種不同類型的咖啡產品，共49款樣本，當中有47款樣本檢出基因致癌物丙烯酰胺，其含量可相差近14倍，並以即溶咖啡粉的含量較高。本會提醒消費者，由於未成熟的咖啡豆中含有大量的游離天冬酰胺，於高溫烘焙下會形成丙烯酰胺。

測試亦發現樣本間的咖啡因含量懸殊，即溶咖啡粉由於經過提取和濃縮處理，其平均咖啡因含量較咖啡豆、咖啡膠囊及咖啡粉樣本為高。以樣本標示的沖調方法計算，飲用1杯咖啡最高可攝入的咖啡因約295毫克，飲用2杯便會超過成人的每日建議攝入量（400毫克）。消費者應注意，長期攝入咖啡因，會增加人體對咖啡因的耐受性，導致飲用者需要更高劑量才能達到相同的生理作用；還可能對咖啡因產生生理依賴，一旦突然停止攝入，便有機會出現咖啡因戒斷症狀，包括頭痛、易怒和疲勞等。

另外，測試於46款咖啡樣本檢出除害劑，其中45款檢出福爾培，一種在蔬果中常見的除害劑，對眼部和咽喉有刺激性；有13款檢出鄰苯基苯酚，雖然其急性毒性不高，但動物實驗顯示能引致膀胱腫瘤；另有3款檢出噻蟎酮，一種常見於堅果類植物的除害劑，屬於輕度至中度的急性毒性；以及1款檢出聯苯，長期攝入有機會引起腎臟中毒或中樞神經系統的症狀。當中38款的福爾培、1款的鄰苯基苯酚，及1款的噻蟎酮含量超出歐洲食品安全局訂下的最高殘餘限量（福爾培：每公斤0.10毫克；鄰苯基苯酚及噻蟎酮：每公斤0.05毫克）；其中1款樣本的福爾培檢出量更超出上限逾6倍。



Milk and Milk Beverages

Known for its nutritional values, milk is a daily source of calcium and protein for many people. The Council tested 40 samples of milk and milk beverages, including 26 treated with ultra-high temperature processing (UHT) and 14 pasteurised samples. Test items included veterinary drugs, preservatives, microbiological and nutrient contents. The labelling information of the samples was also reviewed.

All tested samples showed a satisfactory overall level of hygiene. The Milk Regulation lays out that after pasteurisation, milk or milk beverages should have a total bacterial count of less than 30,000 per millilitre. Only 1 sample of pasteurised milk was found to contain 20 colony-forming units of bacteria. The Council reminded consumers that pasteurised milk and milk beverages should be stored at 4°C or below, while unopened UHT sterilised products could be stored at room temperature in a cool, dark place away from direct sunlight.

According to the test results, 27 samples had calcium contents that could be regarded as a “source of calcium” (not less than 60mg calcium per 100ml liquid food sample). Even though 30% (13 samples) reached “high calcium” level (not less than 120mg calcium per 100ml liquid food sample), the calcium content varied as much as onefold. Therefore, consumers were advised to check the nutrition label when purchasing “high calcium” products.

As for the protein content, apart from 2 milk beverage samples which only contained 2.1g and 2.5g of protein per 100ml sample, the other 38 samples could be regarded as a “source of protein” (not less than 3g protein per 100ml liquid food sample). Based on the average protein content of all samples (3.4g per 100ml), consuming 235ml of the milk would provide a protein intake of around 8g, only amounting to 12.3% and 14.5% of the recommended daily protein intake for adult males and adult females (65g and 55g) respectively. Consumers, especially the health-conscious and vegetarians, were reminded not to rely on milk as the sole source of protein, but to maintain a healthy, balanced and diverse diet.

牛奶及牛奶飲品

牛奶的營養豐富，是不少人吸收鈣質和蛋白質的來源。本會測試 40 款牛奶及牛奶飲品，當中 26 款樣本經超高溫處理，14 款經巴士德消毒。測試項目涵蓋獸藥、防腐劑、微生物、營養素含量等，亦檢視了各樣本的標籤資料。

測試樣本的整體衛生水準令人滿意。《奶業規例》規定，經巴士德消毒方法殺菌後，牛奶及牛奶飲品的總含菌量應低於每毫升 30,000 個細菌。只有 1 個巴士德消毒牛奶樣本被發現含有 20 個細菌菌落。本會提醒消費者，經巴士德消毒方法殺菌的牛奶及牛奶飲品應儲存在 4°C 或以下，而未開封的超高溫處理產品可儲存在室溫陰涼的地方，避免陽光直射。

根據測試結果，27 款樣本的鈣含量可被視為「鈣的來源」食物（每 100 毫升液體食物含不少於 60 毫克鈣）。即使 3 成樣本（13 款）達到「高鈣」水準（每 100 毫升液體食物含不少於 120 毫克鈣），樣本間鈣含量的差距仍可高達一倍。因此，消費者在購買「高鈣」產品時，應查閱營養標籤。

蛋白質含量方面，除 2 款樣本每 100 毫升只含有 2.1 克及 2.5 克蛋白質外，其他 38 款樣本均可被視為「蛋白質來源」食物（每 100 毫升液體食物含不少於 3 克蛋白質）。根據所有樣本的平均蛋白質含量（每 100 毫升含 3.4 克），飲用 235 毫升牛奶可提供約 8 克的蛋白質攝入量，分別只佔成年男性及成年女性每日建議的蛋白質攝入量（65 克及 55 克）的 12.3% 及 14.5%。本會提醒消費者，特別是注重健康和素食人士，不要依賴牛奶作為蛋白質的唯一來源，應保持健康、均衡和多樣化的飲食。



Biscuits

As one of the most versatile snacks, biscuits are popular with adults and kids alike. The Council tested 60 samples of pre-packaged biscuits on the market, including 17 crackers, 9 sandwich biscuits, 8 wafers, 7 biscuit sticks/finger biscuits/cigar biscuits, 6 soda biscuits, 4 digestives, 2 ring biscuits, 1 marie biscuit, and 6 types of other biscuits. Test items included the food safety and nutrient content of the samples.

Glycidol and acrylamide are both genotoxic carcinogens which may induce cancer in experimental animals, and the intake of genotoxic carcinogens should be as low as reasonably practicable/achievable. The test revealed that 54 samples contained glycidol. Acrylamide was also detected in 55 samples, amongst which 4 samples exceeded the benchmark level (350µg/kg) for general biscuits and wafers laid out by the European Union (EU), while 3 cracker samples exceeded the benchmark level (400µg/kg) for crackers. The Council anticipates the authorities to make reference to the EU and impose benchmark levels for foods with a higher risk of containing excessive levels of acrylamide, such as French fries, crisps, biscuits and crackers, for the industry to follow.

Another contaminant 3-MCPD was detected in 56 samples with a huge disparity in the levels. Taking the biscuit sample with the highest 3-MCPD level (2,000µg/kg) as an example, consuming 8 pieces (66.7g) would incur a 3-MCPD intake that exceeded the Tolerable Daily Intake (not more than 120µg for a 60kg adult) recommended by the EFSA.

In terms of the nutrition, 33 samples reached the "high-fat" food benchmark, while 46 samples were found to contain trans fatty acids (TFA), the highest being a sample of wafer which contained 1.36g TFA per 100g. TFA could affect the levels of "good" and "bad" cholesterols, consequently increasing the risk of coronary heart disease. Furthermore, 27 samples reached the benchmark for "high-sugar" foods (more than 15g sugars per 100g solid food sample), while 13 samples were classified as "high-sodium" foods. If 7 pieces (105g) of the cracker sample with the highest sodium content (1,090mg per 100g) was consumed, the sodium intake would be over 50% of WHO's recommended daily limit for adults (2,000mg sodium).

The Council reminded consumers to pay heed to the health risks of consuming various types of biscuits, and at the same time urged manufacturers to improve the formula and raw materials to reduce the levels of contaminants, fat, sugar, and sodium in food.

餅乾

不論男女老幼都愛吃種類繁多的餅乾作為零食。本會測試了市面上 60 款預先包裝餅乾樣本，包括 17 款克力加餅、9 款夾心餅、8 款威化餅、7 款餅乾棒/餅乾條/手指餅、6 款梳打餅、4 款消化餅、2 款水泡餅、1 款瑪利餅，以及 6 款其他餅乾。測試項目包括各樣本的食物安全及營養素含量。

環氧丙醇和丙烯酰胺都是基因毒性致癌物，可引致實驗動物患癌，其攝入量愈少愈好。測試顯示，54 款樣本含有環氧丙醇；55 款樣本則檢出丙烯酰胺，其中 4 款超出歐盟為一般餅乾及威化餅訂定的基準水平（每公斤 350 微克），3 款克力加餅樣本超出其基準水平（每公斤 400 微克）。本會期望有關當局參考歐盟的做法，為有較高風險含過量丙烯酰胺的食物，如薯條、薯片、餅乾及克力加餅等，訂定基準水平，讓業界跟從。

測試亦發現 56 款樣本檢出氯丙二醇（3-MCPD），樣本間的含量差距很大。以 3-MCPD 水平最高的餅乾樣本（每公斤 2,000 微克）為例，食用 8 片（66.7 克）所攝入的 3-MCPD 分量，已超過歐洲食物安全局建議的每日最高可攝入量（60 公斤的成年人不多於 120 微克）。

營養方面，33 款樣本達到「高脂」食物水平，而 46 款樣本則檢出反式脂肪酸，其中含量最高的樣本是 1 款威化餅，每 100 克含 1.36 克反式脂肪酸。反式脂肪酸會影響好壞膽固醇的水平，從而提高患心血管疾病的風險。此外，27 款樣本達到「高糖」食物水平（每 100 克固體食物含超過 15 克糖），而 13 款則可界定為「高鈉」食物，如食用 7 塊（105 克）鈉含量最高的餅乾樣本（每 100 克 1,090 毫克），鈉的攝入量將超出世衛建議的成人每日上限（2,000 毫克鈉）的一半。

本會提醒消費者留意食用各類餅乾的健康風險，同時促請生產商改進配方和原材料，以降低食物中污染物、脂肪、糖和鈉的含量。



Rice Noodles

Easy to cook and often considered a healthier staple food, noodles made from rice are a key part of many consumers' daily diet. The Council tested 30 samples of pre-packaged rice noodles, out of which 27 were dried noodles, including vermicelli, flat rice noodles ("ho fun"), rice noodles ("mixian"), Thai rice noodles, and Korean noodles, while 3 were fresh mixian. The test covered only the noodles and excluded the seasoning or sauce, with test items including metallic contaminants, nutrient content and the allergen gluten, while the labelling information was also reviewed.

The protein content (per 100g) was found to have a huge variance of over 21 times amongst the 27 dried noodles. Manufacturers might add corn starch or other types of starch to rice noodles to improve the texture during cooking, but this will simultaneously reduce its ratio of rice ingredient, lowering the protein ratio. Although the addition of starch could make the rice noodles more al dente, it is also harder to digest. Senior citizens or people suffering from indigestion were advised to pay extra heed.

Aside from 7 samples which could not be directly compared due to the nutrient contents of seasoning, sauces and other flavourings being included in their nutrition labels, over 70% (17) of the remaining 23 samples were found to have a discrepancy between the declared and detected nutrient contents in compliance with the requirements set out in the CFS' *Technical Guidance Notes on Nutrition Labelling and Nutrition Claims*, amongst which the sodium content of 1 dried Thai rice noodles sample even exceeded the labelled value by over 41 times. Besides, 2 samples were detected with the allergen gluten but failed to declare this in the packaging as regulated, which could potentially cause health risks to individuals with gluten intolerance. Furthermore, over 80% (26) of the samples were detected with metallic contaminants — 24 with cadmium, 14 with chromium, and 9 with the carcinogen inorganic arsenic. The Council reminded consumers to pay attention to the differences in nutrient, energy and fat contents between rice noodles and rice, so as to maintain a balanced diet.

Children's Products

Plastic Toys

With less chance to play outdoors during the pandemic, children have spent much more time housebound with toys as their main companions. In particular, stress-relieving squeeze toys and poppits have become highly popular in recent years. As children are often in close contact with such sensory toys, kneading and squeezing them all the time, their safety is a major concern.



In the Council's test on 29 plastic toys, 22 models failed to comply with the requirements of the EU toy safety standard on mechanical and physical aspect, of which 15 models showed structural safety problems. In the EN 71-1 tension test for reasonably foreseeable use or abuse, all 8 stress-relieving silicone toys (poppits), 3 squeeze toys, and 2 bath toys broke into small parts, amongst which the inflation valve of 1 inflatable bath toy fell off after the test. If toddlers or children swallow the small parts by accident, there might be airway blockage resulting in suffocation risks. In addition, the elastic constant of 1 squeeze toy model — a yo-yo — exceeded the upper limit of the standard, indicating that the toy's rebound could injure children playing with it.



米製麵食

方便烹調、被認為較健康的米製麵食，是不少消費者的日常主食。本會測試了 30 款預先包裝米製麵食樣本，當中 27 款為乾麵食樣本，包括乾米粉、乾河粉、乾米線、乾金邊粉和韓式麵食，餘下 3 款為保鮮米線樣本。是次檢測只包括樣本的麵食部分，不包括調味粉或醬汁，測試項目包括金屬污染物、營養素含量及致敏物麩質，亦檢視了樣本的標籤資料。

各樣本的蛋白質含量懸殊，以每 100 克計算，27 款乾麵食樣本的蛋白質含量可相差逾 21 倍。製造商或會在米製麵食添加粟米澱粉或其他澱粉，以改善烹煮時的質感，但此舉同時令白米成分於麵食的比例減少，降低蛋白質比例。添加了澱粉的米製麵食雖然較有嚼勁，但較難消化，長者或患有消化不良的人士宜多加注意。

7 款樣本因為包裝上的營養標籤包含了調味粉或醬汁等配料的營養素含量，未能直接比較；而其餘 23 款樣本中，逾 7 成（17 款）所標示的營養素含量與測試結果的差距不符食安中心《營養標籤及營養聲稱技術指引》的要求，當中 1 款乾金邊粉樣本的鈉含量，更與標示值相差逾 41 倍。另外，測試發現有 2 款樣本檢出麩質，但沒有依規例作出標示，可能會使對麩質過敏的人士構成健康風險。此外，逾 8 成（26 款）樣本檢出金屬污染物，分別有 24 款樣本檢出鎘、14 款檢出鉻、9 款檢出俗稱「砒霜」的致癌物無機砷。本會提醒消費者，宜注意米製麵食與米飯的營養、熱量、脂肪的分別，以保持均衡飲食。

兒童產品

塑膠玩具

疫情下小朋友到戶外玩樂「放電」的機會大減，長時間留在家中，玩具自然成為兒童的主要玩伴，當中舒壓矽膠玩具（poppit）及可擠壓玩具（squeeze toy）近年非常流行。由於兒童經常與此類感官玩具密切接觸，無時無刻都將其「搓圓揪扁」，其安全性備受關注。



本會測試 29 款塑膠玩具，當中 22 款樣本在機械及物理性測試，未能符合歐盟玩具安全標準的要求；其中 15 款樣本有結構安全問題，在歐盟玩具標準 EN 71-1 的合理濫用測試下，8 款舒壓矽膠玩具、3 款可擠壓玩具和 2 款沐浴玩具出現破裂而產生小部件，其中 1 款吹氣沐浴玩具的充氣活瓣經測試後脫落，如果幼童誤吞小部件，有機會阻礙呼吸，引致窒息。另外，1 款可擠壓玩具屬於搖搖球，彈性系數超過標準中的上限，兒童玩耍時有機會被反彈的搖搖球弄傷。

As children play with toys for long periods of time, and may even put them into their mouths, structural and material safety are equally important. Results showed that the potential carcinogen polycyclic aromatic hydrocarbons (PAHs) were found in more than 85% (25) of the models, amongst which 2 had naphthalene levels exceeding the upper limit of the German safety standard by almost 4 to 11 times. According to the EU directive on chemical classification, naphthalene is classified as Category 2 carcinogenic and Category 4 in acute toxicity.

Phthalates are often added to PVC plastic materials to increase elasticity and durability. In the phthalates family, di(2-ethylhexyl) phthalate (DEHP) and benzyl butyl phthalate (BBP) have been found to be carcinogenic and reproductive toxic. Test results revealed that 3 models contained DEHP, the highest of which reached 25%, equivalent to 250 times the upper limit of the Toys and Children's Products Safety Ordinance. At the same time, this squeeze toy was detected with a BBP concentration of 0.06%, while another bath toy model was detected with a BBP concentration of 0.006% to 0.028%.

Children's Art Materials

Colourful crayons and fingerpaints are common art materials for children. While drawing or painting, they may rub their eyes or face with paint-smear hands, or even swallow the paints by mistake, increasing the risk of ingesting harmful substances contained within.

To investigate the risks, the Council tested 19 models of children's art materials, including 12 models of crayons and 7 models of fingerpaints. 10 models showed migration of toxic metals, including 4 crayon and 2 fingerpaint models detected with aluminium migration. Amongst these, 2 crayon models and 1 fingerpaint model exceeded the EU Toy Safety Directive's limit for their respective category.

The main ingredient of crayons is derived from petroleum, and PAHs are a known harmful substance in petroleum. 8 models of crayons were found to contain 1 to 4 types of PAHs, including 7 models detected with naphthalene, a possible carcinogen which is volatile and could be inhaled. Of these, the 2 models with the highest naphthalene levels (1.2ppm) exceeded the limit of the German safety standard (1ppm). In addition, 5 models contained pyrene, an allergen for the skin and respiratory tract, amongst which the model with the highest level (8.3ppm) exceeded the total PAH limit; benzo[ghi]perylene was detected in 5 models, all exceeding the limit (0.2ppm) of the German safety standard.

Test results showed that over half (4) of the fingerpaint models did not contain approved embittering agents and failed to comply with the requirements of the EN 71-7 standard in the EU Toy Safety Directive. Also, upon inspection of the packaging labels, the required standard product information or warnings of 4 models were found missing. The Council urged suppliers to promptly improve the product safety and labelling.

兒童長時間接觸玩具，甚至會將其放進口中，因此除了結構安全，物料安全亦十分重要。測試發現逾八成半（25款）樣本的物料檢出多環芳香烴（PAHs），當中2款樣本的萘含量超出德國的安全上限4至11倍。根據歐盟相關法規的分類，萘屬於第二類致癌物質及第四類急性毒性。

聚氯乙烯（PVC）類塑膠物料經常添加塑化劑，以提高彈性和耐用程度。其中一種常用塑化劑鄰苯二甲酸酯中的DEHP、BBP等可令人類致癌，也可能損害生殖系統。測試中3款樣本檢出DEHP，最高含量的1款為25%，達到《玩具及兒童產品安全條例》上限的250倍；這款可擠壓玩具同時被檢出含0.06% BBP，另有1款沐浴玩具亦檢出含0.006%至0.028% BBP。

兒童美術用品

七彩繽紛的蠟筆和手指畫顏料，是兒童經常接觸到的美術用品，在繪畫過程中，他們或會用沾了顏料的手擦眼睛或面部，甚或不小心把顏料放入口中，增加攝入有害物質的風險。

為調查有關風險，本會測試19款兒童美術用品，包括12款蠟筆及7款手指畫顏料。10款樣本檢出有害金屬遷移，包括4款蠟筆樣本及2款手指畫顏料檢出鋁遷移，當中2款蠟筆和1款手指畫顏料的鋁遷移量超出歐盟玩具安全標準的上限。

蠟筆的主要成分提煉自石油，而PAHs是石油原材料中的有害物質。測試結果顯示8款蠟筆樣本分別檢出1至4種PAHs，當中7款樣本檢出萘，屬於可能令人類患癌的物質，並具揮發性，可透過呼吸吸入，檢出量最高（1.2ppm）的2款樣本超出德國安全標準的上限（1ppm）；5款樣本檢出芘，屬於皮膚和呼吸道致敏物，檢出量最高（8.3ppm）的1款樣本超出PAHs總量上限；5款樣本檢出苯并[ghi]芘，全部超出德國安全標準的上限（0.2ppm）。

測試結果顯示，逾一半（4款）手指畫顏料沒有檢出認可的苦味劑，未能符合歐盟玩具標準EN 71-7的要求。此外，檢視樣本的包裝發現，其中4款樣本分別欠缺標準要求的產品資料或警告字句。本會敦促供應商盡快改善產品安全及標籤。





Cosmetics and Personal Care

Make-up Removers

Perfectly applied make-up will instantly spruce up the face. At the same time, proper and thorough removal of cosmetic products is equally important for skincare though often neglected. The Council tested 40 make-up removers specially for eyes or suitable for both the face and eyes, including 19 dual-phase, 10 oil-based and 11 water-based models. As a whole, the safety of these products was satisfactory and consumers can use them with confidence.

The cleansing performance of dual-phase make-up removers was better, with all 19 models having outstanding cleansing power ranging from 63.1 to 86.5, amongst which 95% were rated 4 points or more. 9 models received an overall 5-star rating but their prices differed by over 3 times, signifying once again there are cheaper but high quality products on the market.

Oil-based models varied in performance, with only 1 model achieving a cleansing power of over 70, while 2 models performed relatively poorly with cleansing powers of 24.3 and 12.8 respectively, one of which had the highest unit price (\$3/ml) amongst all models. Water-based make-up removers had the weakest cleansing performance. Except for 1 model, the other 10 models had disappointing cleansing powers, thus only received overall ratings of 2 to 2.5 stars.

Upon comparing the 3 types of make-up removers, the dual-phase models had the best overall performance while their average price was mid-range (\$1.26/ml). In comparison, the average unit price for water-based models was the lowest (\$0.96/ml) while that for oil-based models was the highest (\$1.32/ml).

The Council reminded consumers that water-based make-up removers had limited cleansing efficacy on waterproof and greaseproof cosmetics and may not be able to completely remove such products, thus increasing the risk of clogging or enlarging pores, as well as the chance of acne and fat granules.

化妝品及個人護理

卸妝液

美妝能為顏容倍添光彩，而適當和徹底卸妝對於護膚同樣重要，但卻經常被忽視。本會測試 40 款專為卸除眼部化妝或面部眼部同樣適用的卸妝液，包括 19 款水油混合性卸妝液、10 款油性卸妝液和 11 款水性卸妝液，發現安全方面整體令人滿意，可放心使用。

水油混合性卸妝液樣本的卸妝效能較好，全部 19 款的卸妝效能指數介乎 63.1 至 86.5，卸妝表現突出，當中 9 成半樣本的評分獲 4 分或以上。9 款獲 5 星總評，但價格相差超過 3 倍，再次證明市場上有價廉物美的產品。

油性卸妝液樣本的卸妝表現較參差，只有 1 款卸妝效能指數達 70 以上，而 2 款樣本卸妝表現則較為遜色，卸妝效能指數分別只有 24.3 和 12.8，其中 1 款的每毫升售價（\$3）更是眾多樣本中最高。水性卸妝液則為 3 類樣本中卸妝表現最為遜色，除 1 款樣本以外，其餘 10 款樣本的卸妝效能表現令人失望，總評僅得 2 至 2.5 星。

比較 3 類型卸妝液，水油混合性卸妝液卸妝效能最佳，而每毫升平均售價只屬中等（\$1.26）；水性卸妝液在 3 類中每毫升平均售價最低（\$0.96），油性卸妝液樣本則最高（\$1.32）。

消費者如使用水性卸妝液，卸除防水防油的化妝品，或未能完全卸除化妝品和清潔皮膚，有機會堵塞毛孔或令其變得粗大，增加長出暗瘡或油脂粒的機會。



Body Lotions for Babies and Children

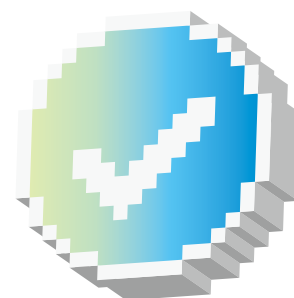
As babies and young children have delicate skin, parents should be particularly careful when selecting body lotions for them. The Council tested 40 models of body lotions for babies and toddlers, including 13 claimed to be suitable for newborns.

Fragrance allergens were detected in 22 models, of which 8 models had a relatively high total concentration. The model detected with the highest amount (0.45%) was also found to contain the fragrance substance hydroxyisohexyl-3-cyclohexene carboxyaldehyde (HICC), which has been banned for use in cosmetic products by the EU Commission. HICC is a high potency skin sensitiser and had been identified as one of the most common causes of skin allergies in children.

10 models were found to contain 3 to 10 types of fragrance allergens. Amongst them, the 2 models detected with the highest number of fragrance allergens did not list out all of the detected fragrance substances on their labels. As such, parents would not realise the presence of such fragrance allergens by reading the product labels.

Aside from fragrance substances, 4 models were detected with free formaldehyde at concentrations of 0.018% to 0.072% (equivalent to 180ppm to 720ppm), all in compliance with the maximum limit of 0.2% (equivalent to 2,000ppm) set by the Mainland. However, the European Scientific Committee on Consumer Safety (SCCS) pointed out that exposure to formaldehyde at concentrations up to 130ppm to 370ppm could trigger allergic reactions in individuals with formaldehyde allergy. In addition, 1 model was even labelled as "0% formaldehyde" and "no added formaldehyde", which contradicted with the test results.

In order to better safeguard the health of infants and toddlers, the Council urged manufacturers to stop using HICC and other fragrances that lacked sufficient safety evidence. Despite the fact that some countries and regions do not have requirements on the labelling of fragrance allergens, the Council opined that product suppliers should take the responsibility to enhance the transparency and accuracy of the labelling information.



嬰幼兒潤膚乳

嬰幼兒皮膚幼嫩，父母為他們挑選潤膚乳時應特別小心。本會測試了40款嬰幼兒身體潤膚乳，當中13款說明適合初生嬰兒使用。

測試結果顯示，22款樣本檢出香料致敏物質，當中8款樣本檢出的香料致敏物質總量相對較高，其中檢出總量最高(0.45%)的樣本，更檢出歐盟禁用於化妝品的香料物質新鈴蘭醛(HICC)。HICC是高致敏性的致敏物，是導致兒童出現皮膚過敏的常見致敏原之一。

樣本中，有10款檢出3至10種香料致敏物質。其中檢出香料致敏物質種類最多的2款樣本，並沒有標示任何相關物質。因此，家長們無法從產品標籤資料辨認這些香料致敏物。

除香料物質外，4款樣本檢出游離甲醛，檢出量由0.018%至0.072%(相等於180ppm至720ppm)，全部符合內地總量上限規定0.2%(相等於2,000ppm)。不過，歐盟消費者安全科學委員會指出，接觸濃度達到130ppm至370ppm的甲醛，足以令對甲醛過敏人士引發過敏反應。此外，其中1款樣本的標籤更說明產品「0%甲醛」及「無添加甲醛」，與測試結果不符。

為保障嬰幼兒的健康，本會呼籲生產商應停止使用HICC和其他欠缺足夠安全數據支持的香料物質。儘管目前部分國家或地區沒有就標示香料致敏物質訂立相關規定，但本會認為供應商有責任提高標籤資料的透明度和準確性。



Electrical Products

The pandemic has reshaped the public's dining habits, with many households cooking at home more often. To meet such consumer needs, the Council tested cooking appliances with emerging popularity and advised consumers on their safety and performance.

Electric Grills

Indoor grilling has become a widely popular cooking trend in recent years. One simply needs to prepare the ingredients, and plug in the electric grill to enjoy freshly cooked food right off the grill, saving time from cooking.

The Council conducted a test on 11 electric grills to evaluate their safety and performance. 7 models were found to have safety issues of varying degrees. 1 model failed in the abnormal operation test, as it emitted smoke and flames during the simulation of malfunction of thermal control while operating with a 1.15-time input power, posing potential fire hazard to users. Subsequently, the Electrical and Mechanical Services Department (EMSD) announced that the public should stop using the product. Other non-compliance regarding product safety was found in protection against access to live parts, insulation distance, temperature rise, etc.

The performance test evaluated the models' grilling performance, cooking fume emission, preheating temperature and scratch resistance of the non-stick coating. After preheating, the highest temperature discrepancy recorded on the models at different positions of the grill plates ranged from 23.4°C to 82.6°C, reflecting uneven heat distribution.

The cooking fume emission test was based on the average amount of cooking fumes released when grilling 1 piece of burger patty, with 5 points being the highest, indicating a lower level of cooking fume emission. 2 models were only rated 2 points, including 1 which claimed to be a smokeless grill. Indoor grilling would release a large amount of cooking fumes, which could pose carcinogenic risks in the long run if the interior is not well ventilated.



電器產品

疫情改變了大眾的用餐習慣，令不少家庭較常在家煮食。為滿足消費者的需求，本會測試了新興的煮食電器，並就其安全性和效能向消費者提供建議。

電燒烤爐

近年在室內燒烤的飲食文化大行其道，只要準備好食材，插上電燒烤爐便可立刻享用燒烤食物，省卻煮食時間。

本會測試了 11 款電燒烤爐的效能及安全，發現當中 7 款樣本出現不同程度的安全隱患。1 款樣本未能通過非正常操作測試，模擬在溫度調節器失靈，並以 1.15 倍的額定輸入功率操作時冒煙及著火，有潛在火警風險。機電工程署其後呼籲消費者停用該型號。其他安全問題出現於防觸電保護、絕緣距離及溫升等。

效能測試主要比較各樣本的燒烤表現、油煙釋放量、預熱表現及塗層耐刮程度。樣本預熱後，於不同位置量得的最高溫度差異由 23.4°C 至 82.6°C，反映溫度分佈不均勻。

油煙釋放量測試以煎煮 1 件漢堡扒的平均油煙量計算，以 5 分最高，即油煙釋放量較低，有 2 款只取得 2 點評分，當中包括 1 款聲稱為無煙燒烤爐。屋內燒烤時會釋出大量的油煙，在空氣不流通的室內環境使用，長遠有機會構成致癌風險。

Low-carb Rice Cookers

As consumers are increasingly conscious of the benefits of a healthy diet, low-carb rice cookers have become a popular household appliance in recent years due to their claims of cooking rice with a lower carbohydrate content than that of traditional rice cookers, thus helping consumers to control their blood sugar level and body weight.

The Council tested 11 models of low-carb rice cookers on their carb-reducing performance, heat efficiency, power consumption, cooking performance and ease of use. 9 of the models were equipped with both "normal rice mode" and "low-carb rice mode". Compared with normal rice, only 5 models of low-carb rice showed a significant drop in carbohydrate content ranging from 10.1% to 45.3%. However, if the amount of raw rice remains unchanged, the difference in carbohydrate intake between low-carb rice and normal rice was insignificant.

Upon comparing the normal rice cooked by a traditional rice cooker with the low-carb rice cooked by the 11 models, the carbohydrate content of the low-carb rice cooked by 6 models was found to be even higher than the normal rice. Since the stability of low-carb rice was yet to be tested and confirmed, it was not recommended for diabetics to rely on low-carb rice cookers to control their condition.

Based on the recommendations from the Department of Health, Hong Kong Medical Association and Hong Kong Dietitians Association, consumers were advised to think twice before purchasing low-carb rice cookers.

減醣電飯煲

消費者愈來愈注重健康飲食，減醣電飯煲近年成為人氣家電，標榜煮熟的米飯醣分較傳統電飯煲低，有助控制食用者的血糖及體重。

本會測試 11 款減醣電飯煲的減醣表現、加熱效率、省電程度、煮飯表現及使用方便程度。9 款兼備「正常模式」及「減醣模式」的樣本中，只有 5 款使用「減醣模式」煮出來的減醣飯，較以「正常模式」煮出來的米飯，其碳水化合物含量減幅較明顯，由 10.1% 至 45.3% 不等。不過，若生米量不變，進食減醣飯和「正常模式」飯，所攝取的碳水化合物含量沒有明顯分別。

若將傳統電飯煲煮的正常飯與 11 款減醣電飯煲煮出來的減醣飯作比較，6 款樣本的減醣飯平均碳水化合物含量較傳統電飯煲煮出來的米飯高。由於減醣飯的減醣穩定性亦有待測定，不建議糖尿病患者依賴減醣電飯煲來控制病情。

綜合衛生署、香港醫學會和營養師協會等多方意見，消費者選購減醣電飯煲前宜三思。

9款有「減醣」和「正常」模式電飯煲

(比較每100克飯的碳水化合物含量)



Household Products

Cast Iron Cooking Pots

Cast iron cooking pots are a kitchenware favourite amongst avid home cooks due to their remarkable heat conductivity and heat retention, not to mention their stylish appearance.

However, the Council's test on cast iron cooking pots found that 4 out of the 7 tested models released different types and amounts of metals that exceeded the international standard or the upper limit set by the Council of Europe (CoE), of which 1 model's iron release amount exceeded the upper limit of the CoE's guide by 54 times. Another model was even detected with the carcinogenic heavy metals arsenic and cadmium, of which the release amount of arsenic exceeded the upper limit of the international standard by 16 times. The Council urged manufacturers to review the products' raw materials and manufacturing process promptly and improve product quality, in order to safeguard the health of consumers.

The test also revealed considerable variance between the heat conduction speed and evenness of heat amongst the models.

When heated using the same type of cooker, the models showed a nearly 3-time disparity in their heat conduction speed. In terms of evenness of heat, the interior bottom of 1 model had a maximum temperature difference of 191°C when heated on an electric ceramic hob, making it hard for users to control the overall cooking quality.

If the handle temperature of cast iron cooking pots is too high during cooking, it may scorch the user. The test revealed that the temperature of the models' handles ranged from 89.3°C to 97.3°C, all exceeding the upper limit (55°C) set by the European standard. The Council reminded consumers to wear oven mitts or use pot holders to prevent scorching.

Slippers

To prevent slipping and falling which are common household accidents, especially for the elderly, consumers should consider not only the comfort of slippers, but also their slip resistance performance. The Council tested 30 household slippers, of which 7 claimed to be "slip resistant" or "anti-slip". The cheapest (\$10) model was rated 4.5 points overall, while the most expensive model (\$520) only scored 3 points, reflecting that product price does not necessarily correlate to their slip resistance performance. The test items covered slip resistance on dry and wet surfaces, and a review of the materials and tread patterns on the outsoles.

家居產品

鑄鐵鍋

鑄鐵鍋的傳熱能力及保溫效果好，而且美觀時尚，深受下廚人士歡迎。

然而，本會測試的7款鑄鐵鍋樣本中，有4款檢出不同金屬的釋放量，超出國際標準或歐洲委員會所訂的上限；當中1款樣本檢出的鐵釋放量超出歐洲委員會的指引上限54倍，另1款更檢出致癌重金屬砷及鎘，而砷的釋放量更超出國際標準上限16倍。本會促請生產商立即審視產品原材料及生產流程，改善產品質素，以保障消費者健康。

測試亦發現鑄鐵鍋的傳熱速度及熱力均勻度差異很大，使用相同爐具加熱，樣本間的傳熱速度可相差近3倍。熱力均勻度方面，1款樣本於電陶爐加熱時，鍋內底的最大溫差可高達191°C，令烹調效果難以掌握。

烹調時，若鑄鐵鍋的手柄溫度過高會容易燙傷。測試結果發現樣本的手柄溫度介乎89.3°C至97.3°C，全部超出歐洲標準所訂的上限(55°C)。本會提醒消費者應先戴上隔熱手套或使用隔熱墊，避免燙傷。



拖鞋

滑倒及跌倒是常見的家居意外，尤以長者為甚，故此消費者在揀選拖鞋時，不應只考慮穿著時是否舒適，也要顧及是否具備良好的防滑效能。本會測試的30款家居拖鞋，其中7款有「防滑」、「止滑」等聲稱。測試結果發現，售價最低(\$10)的樣本總評獲4.5分，相反售價最高(\$520)的樣本僅獲3分，反映價格與產品的防滑表現沒有必然關係。測試項目涵蓋樣本於乾燥及濕滑地板上的防滑表現，並檢視了樣本的鞋底所用物料、坑紋設計等。

Sufficient friction between the outsoles of slippers and the floor surface is required to exhibit ideal anti-slip efficacy. To simulate walking on the floor with slippers, the test referenced ASTM F2913-19 and measured the Coefficient of Friction (CoF) between the outsole (forepart and heel), and 4 types of tiles and flooring commonly used at home, namely quarry clay tiles, ceramic tiles, wooden floors and vinyl floors. The higher the CoF, the better the slip resistance.

On dry test surfaces, 26 models performed desirably on all 4 types of test surfaces with a CoF of 0.3 or above, the slip resistance requirement set by the shoe industry on general footwear, but the remaining 4 models failed to reach a CoF of 0.3 on ceramic tiles, wooden floors and/or vinyl floors, and performed the worst on vinyl floors with a CoF from 0.2 to 0.29 only.

Water on wet floor acts as a lubricant between the outsole and the floor, thus reducing the friction in between. Compared with dry test surfaces, all models obtained a significantly lower CoF on wet surfaces. Only 14 models maintained a CoF of 0.3 or above on all 4 test surfaces, while the slip resistance of the remaining 16 models on wet surfaces was unsatisfactory, of which the CoF of 2 models were under 0.3 on all 4 test surfaces. The Council alerted consumers that wearing these models might incur higher slipping risks.

Outdoor Activity Products

Hiking Boots and Hiking Backpacks

It is important to be well-equipped while hiking in the great outdoors, especially when safety is concerned. The Council jointly tested 11 waterproof hiking boots and 13 hiking backpacks with ICRT. Water resistance, slip resistance, breathability, shock absorption, durability of the mid-cut hiking boots were tested, while the 22L to 30L daypacks were assessed for storage utilisation, water resistance, durability, reflective design, manufacturing quality and cleaning convenience in the laboratory. The outdoor gear was further practically tested by panellists.

It was found that their water resistance performance varied vastly. 3 hiking boots models were found with water entry within an hour in the water immersion test, and 2 hiking backpack models failed to resist rain without a rain cover.

Other findings on hiking boots included serious abrasion and cracking of outsoles upon repeated rubbing and bending, and poor slip resistance on wet surfaces. The test results for the hiking backpacks were considerably better in general, with none of the samples damaged in the durability tests on top handles, shoulder straps or zippers.

Furthermore, concentration of carcinogenic hexavalent chromium was measured for boots made with leather, and the measured levels were lower than the upper limit of the related EU regulation.

拖鞋鞋底與地面之間必須有足夠的摩擦力，才能發揮理想的防滑效能。測試參考 ASTM F2913-19 進行，模擬穿著拖鞋行走時，鞋底與地面接觸的情形，量度鞋底的腳前掌及腳跟位置在 4 種家居常見的地磚及地板上的摩擦係數，分別為粘土磚、瓷磚、木地板及乙烯基地板（俗稱膠地板），數值愈高，代表防滑效能愈好。

於乾燥的測試地面上，26 款樣本在 4 種測試地面上皆有理想的防滑表現，摩擦係數均達 0.3 或以上，即製鞋業就一般鞋具所訂立的防滑效能要求，惟其餘 4 款樣本於瓷磚、木地板及/或膠地板上的摩擦係數未達 0.3，尤其於膠地板上的防滑表現最為遜色，摩擦係數僅為 0.2 至 0.29。

在濕滑地面上，水會在鞋底和地面之間產生潤滑作用，減低兩者之間的摩擦力。相比乾燥的測試地面，全部樣本在濕滑地面上所得的摩擦係數都明顯較低。只有 14 款樣本在全部 4 種測試地面上的摩擦係數能維持 0.3 或以上，餘下 16 款樣本的表現則欠佳，當中 2 款樣本在 4 種測試地面上所得的摩擦係數都低於 0.3。本會警惕消費者穿著該些樣本時有較高的滑倒風險。

戶外活動產品

行山鞋及行山背囊

要安全地在郊外遠足，穿戴優良的裝備十分重要。本會與 ICRT 合作測試了 11 款防水行山鞋和 13 款行山背囊。測試於實驗室進行，分別測試了中筒行山鞋的防水、防滑、透氣度、吸震能力和耐用表現；以及容量由 22 升至 30 升的日用型行山背囊的存儲可用性、防水、耐用、反光設計、製造工藝和清洗方便程度。另外，這些裝備也由多位評審員於戶外進行實測。

測試發現樣本的防水表現差異較大，3 款行山鞋於浸水測試未達 1 小時已出現入水情況，而 2 款行山背囊則於沒有蓋上雨擋時，未能發揮抗雨效果。

個別行山鞋的外底於磨擦及重複屈摺時出現嚴重磨損和破裂，在沾濕地面的防滑表現亦較差。行山背囊的整體測試表現較佳，頂部手挽、肩帶或拉鏈於耐用測試中均沒有受損。此外，測試亦量度皮革製造的行山鞋樣本中的可致癌化學物質六價鉻濃度，但檢出的水平皆低於相關歐盟法規的上限。





Pet Products

Dog and Cat Food

The Council tested 40 models of canned, boxed or pouched wet pet food, comprising 27 complete pet foods and 13 complementary pet foods. 18 of them were for dogs, 20 were for cats, and 2 models claimed to be for both dogs and cats.

Mineral Content

The mineral contents in 80% of the wet food for dogs (16 out of 20 models) and 90% wet food for cats (20 out of 22 models) failed to fully comply with the recommended amounts stated in international guidelines on nutritional contents for complete pet food. Only 4 dog food and 2 cat food models fully met the recommendations laid out by 3 pet food organisations, namely the Association of American Feed Control Officials (AAFCO), the European Pet Food Industry Federation (FEDIAF), and the National Research Council (NRC).

The test results on the 12 models of complete cat food raised more concern. Based on the minimum concentrations of iron and zinc recommended by AAFCO and/or FEDIAF, the iron content of 7 models and the zinc content of 5 models failed to meet the minimum requirements. However, 1 model had zinc content exceeding the maximum concentration recommended by FEDIAF. Besides, the iodine contents in 3 models did not meet the minimum/maximum recommended concentration in cat food suggested by AAFCO and FEDIAF.

The complementary pet food models were generally found to have relatively low concentrations of various minerals, including calcium, iron, copper, manganese, zinc and iodine, whereas the calcium to phosphorus (Ca:P) ratio was also low in general.

Pet owners were reminded that long-term consumption of complete or complementary pet food with insufficient/excessive amounts of various minerals might lead to a number of health risks in pets. For instance, iron deficiency might cause iron deficiency anaemia, resulting in fatigue, increased heart rate and shortness of breath, and might also hinder the growth of kittens. Zinc deficiency might affect skin condition, and cause growth retardation in cats, while on the contrary, excessive intake may affect the absorption of copper and iron. Excessive or insufficient iodine intake may increase the chances of thyroid disorders.

寵物產品

狗糧和貓糧

本會測試了40款罐頭、盒裝或包裝寵物濕糧，包括27款全營養寵物食品（主食罐），以及13款補充性寵物食品（副食罐）。當中18款說明供狗隻食用，20款供貓隻食用，餘下2款則聲稱可同時供貓隻和狗隻食用。

礦物質含量

8成供狗隻食用的濕糧樣本（20款中的16款）和9成貓用濕糧樣本（22款中的20款）的礦物質含量，未能完全符合國際間對全營養寵物食品訂立的相關營養素含量建議。當中只有4款狗糧和2款貓糧樣本完全符合美國飼料管理協會（AAFCO）、歐洲寵物食品工業聯合會（FEDIAF），以及美國國家研究委員會（NRC）訂立的營養素含量建議。

測試結果顯示，12款貓用主食罐樣本的問題較多。以美國AAFCO及/或歐洲FEDIAF就鐵質及鋅所建議的最低含量要求作比較，7款樣本的鐵質含量和5款樣本的鋅含量未能符合最低要求。然而，1款樣本的鋅含量超出歐洲FEDIAF的最高含量建議。測試亦發現3款樣本的碘含量未能符合美國AAFCO和歐洲FEDIAF建議的最低/最高含量水平。

另一方面，副食罐樣本中多種礦物質含量普遍偏低，包括鈣、鐵、銅、錳、鋅和碘等礦物質，而鈣和磷的比例亦較低。

本會提醒寵物主人，如果長時間讓寵物進食礦物質不足或過多的主食罐或副食罐，長遠有機會導致不同的健康問題。例如若攝取鐵質不足，或會造成缺鐵性貧血，導致疲倦、心跳加快、呼吸急促，亦會窒礙幼貓的成長；而鋅攝取量不足，則可能影響皮膚，令貓隻生長遲緩，相反若攝取過量鋅，便可能影響銅和鐵質的吸收；而攝取碘過量或不足，都可能增加出現甲狀腺疾病的機會。





Vitamin D

Vitamin D is a micronutrient that helps maintain healthy bones and teeth for dogs and cats. The test results showed that the amounts of vitamin D3 in 2 complete dog food models fell short of the relevant minimum recommended level for complete pet food for adult dogs. Long-term deficiency of vitamin D might upset the balance of calcium and phosphorus in their blood and affect their immune system. In the long run, it might cause rickets or affect the bone growth of puppies, as well as osteoporosis for adult dogs.

Harmful Substances

1 complementary dog food was detected with lead content that exceeded the maximum limit permitted by EU legislation for complementary pet food (10mg/kg).

Meanwhile, 13 out of the 22 cat food models were detected with mercury content from 0.03mg/kg to 0.296mg/kg (with a moisture content of 12%). The complementary cat food model with the highest concentration of mercury was close to the maximum limit in pet food (0.3mg/kg) laid out in EU regulations.

Considering that excessive lead intake could affect the brain and nervous system of dogs, while a long-term diet with excessive mercury content could cause damage to cats' nervous system and affect their physical coordination and balance, the Council urged pet food manufacturers to control the heavy metals content in pet food products.

Lastly, the Council also urged pet food manufacturers to ensure that complete pet food products have a complete and balanced nutrient profile with reference to the relevant international guidelines, and to include appropriate labelling on complementary pet food to prevent misfeeding by pet owners that may impose health risks to their pets.

維他命 D

維他命 D 是幫助貓狗維持強健的骨骼和牙齒健康的微量營養素。測試結果顯示，2 款狗用主食罐樣本檢出的維他命 D3 含量未能符合為成年狗隻全營養食品設定的相關最低含量建議。如果維他命 D 長期攝取不足，可能影響血液中鈣質和磷質的平衡，對牠們的免疫系統造成影響。長遠有機會令幼犬出現佝僂病，或影響狗隻的骨骼生長，亦可能令成犬出現骨質疏鬆問題。

有害物質

有 1 款狗用副食罐樣本檢出的鉛含量，超出歐盟法規就補充性動物飼料所設的上限（每公斤食品 10 毫克）。

此外，在 22 款貓用濕糧樣本中，13 款檢出水銀，含量由每公斤食品 0.03 毫克至 0.296 毫克不等（以含水量 12% 計算）。而測試中水銀含量最高的貓用副食罐樣本，所檢出的水銀含量十分接近歐盟法規就貓狗飼料所設的上限（每公斤 0.3 毫克）。

如果狗隻攝入過量鉛，可能會影響牠們的腦部及神經系統；而長期讓貓隻食用水銀含量高的膳食，則有機會對牠們的神經系統造成損害，可影響身體協調和平衡。本會促請寵物食品生產商控制寵物食品中的重金屬含量水平。

最後，本會敦促寵物食品生產商參考國際相關營養指引，確保供應的主食產品的營養全面而均衡，並適當標示副食產品，以免寵物主人因錯誤餵飼而損害寵物的健康。



International Comparative Tests

During the year under review, the Council has maintained close collaboration with ICRT and joined forces with consumer associations in other jurisdictions to conduct international comparative tests on the following types of products and to advise consumers on selection tips, especially for expensive or durable products:

- Audio-visual and optical products, including Bluetooth speakers, soundbars, wireless earphones and interchangeable lens camera kits;
- Computer and telecommunications products, comprising chat apps, document scanning apps, security cameras, smart phones, tablet PCs, smart watches and fitness trackers;
- Household, personal and outdoor products, such as coffee machines, antiperspirants and deodorants, hiking backpacks, hiking boots and hard shell jackets; and
- Automobile and cycling products, including child car seats and bicycle helmets.

In addition to the increasing popularity of the test findings in Hong Kong, the Council's reports on products such as cameras, mobile phones, tablets, cosmetics and shower products were viewed by a considerable number of visitors on the Council's Shoptsmart website, which aims to provide extensive shopping information for visitors from the Mainland.

Where Have All the Tested Products Gone?

The products used for testing by the Council were put to further use with a number of items donated to environmental protection organisations, charity groups and non-profit organisations for further consumption and recycling. During the year, a total of 1,228 items, including electrical appliances, household consumables, health products, children's products, skincare products as well as food products, were donated to 5 recipient organisations.

The recipient organisations were: ALBA Integrated Waste Solutions (Hong Kong) Ltd, EFCC Tung Fook Church, Kowloon City Baptist Church Social Services, the Salvation Army and the Society for the Prevention of Cruelty to Animals.

國際測試合作

年內，本會繼續與 ICRT 緊密合作，並聯同其他司法管轄區的消費者組織，對以下不同種類的產品進行國際性比較測試，並特別針對昂貴或耐用產品向消費者提供選擇貼士：

- 影音及光學產品：藍牙揚聲器、整合式揚聲器 (soundbars)、無線耳機及可換鏡頭相機套裝；
- 電腦及通訊產品：即時通訊應用程式、文件掃描應用程式、監控鏡頭、智能手機、平板電腦、智能手錶及運動手環；
- 家居、個人及戶外產品：咖啡機、止汗劑及體香劑、行山背囊、行山鞋及功能外套；及
- 汽車及單車相關產品：兒童汽車安全座椅及單車頭盔。

測試結果除了廣受香港消費者歡迎，部分測試報告，例如相機、智能手機、平板電腦、化妝品及淋浴產品等，在本會專為內地旅客提供全面消費購物資訊而設的「精明消費香港遊」網站中，亦常被瀏覽。

產品測試完畢後的去向

部分經本會測試的產品會捐贈予環保組織、慈善團體及非牟利機構使用及回收。年內，本會共捐贈 1,228 件物品予 5 間機構，當中包括電器、家庭消耗品、健康產品、兒童產品、護膚產品及食品。

受惠機構如下：歐綠保綜合環保(香港)有限公司、中國基督教播道會同福堂、九龍城浸信會社會服務處、救世軍及愛護動物協會。

